

METHOD AND SYSTEM FOR INTERFERENCE AVERAGING
IN A WIRELESS COMMUNICATION SYSTEM

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ABSTRACT OF THE DISCLOSURE

A family of methods for interference averaging in orthogonal frequency division multiplexing (OFDM) systems is provided. The methods can provide interference averaging in situations where an interfering co-channel is either partially or fully loaded. For partially loaded systems, subcarrier puncturing, frequency domain repetition, time domain repetition, and hybrid time-frequency repetition schemes are provided.

For systems using adaptive modulation/coding rates, lower rates and transmit power can be selected in order to perform interference averaging in time-spread and frequency-spread OFDM schemes. In systems with downlink power control, frequency domain mixing can be used to perform interference averaging.

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